

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re application of:** Wagner *et al.*

**Application No.** \_\_\_\_\_

**Filed:** Herewith

**Confirmation No.** \_\_\_\_\_

**For:** GENES REGULATING CIRCADIAN  
CLOCK FUNCTION AND  
PHOTOPERIODISM

**Examiner:** \_\_\_\_\_

**Art Unit:** \_\_\_\_\_

**Attorney Reference No.** 1505-67088

MAIL STOP PATENT APPLICATION  
COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**  
**FOR CONTINUING APPLICATIONS**

Listed on the accompanying forms PTO-1449 are several English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

The present application relies upon U.S. Patent Application No. 09/746,801, which was filed December 20, 2000, which is a continuation-in-part of Application No. 09/513,057, filed February 24, 2000, now Patent No. 6,433,251, which is a continuation-in-part of International Application No. PCT/US99/18747, filed August 17, 1999, which claims the benefit of Provisional Application No. 60/096,802, filed August 17, 1998, for an earlier filing date under 35 U.S.C. §120. Furthermore, documents listed on the accompanying form PTO-1449 were disclosed to or cited by the Patent Office in the earlier U.S. application.

Copies of the documents listed on the accompanying form PTO-1449 that were cited by applicants in an earlier application need not be sent to the Patent Office pursuant to 37 C.F.R. §1.98. However, applicants will furnish the Patent Office with copies upon request.

The following documents listed on the accompanying form PTO-1449 were cited by the Patent Office in U.S. Patent Application No. 09/746,801: **US 5,563,032; Carré**, "ELF3: a circadian safeguard to buffer effects of light," *Plant Science* 7(1):4-6, 2002; **Covington et al.**,

"ELF3 modulates resetting of the circadian clock in Arabidopsis," *Plant Cell* 13:1305-1315, 2001; **GardenWeb Glossary of Botanical Terms**, at [glossary.gardenweb.com/glossary/](http://glossary.gardenweb.com/glossary/), accessed January 6, 2003; **Hicks et al.**, "Early flowering3 encodes a novel protein that regulates circadian clock function and flowering in Arabidopsis," *The Plant Cell* 13:1281-1292, 2001; **Hill et al.**, "Functional analysis of conserved histidines in ADP-glucose pyrophosphorylase from *Escherichia coli*," *Biochemical and Biophysical* 244:573-577, 1998; **Lazar et al.**, "Transforming growth factor  $\alpha$ : mutation of aspartic acid 47 and leucine 48 results in different biological activities," *Molecular and Cellular Biology* 8:1247-1252, 1988; **Town et al.**, Accession No. BH456629, 12/12/2001. Copies of these documents are enclosed.

The following documents listed on the accompanying form PTO-1449 were cited by the Patent Office in U.S. Patent Application No. 09/513,057 (now Patent No. 6,433,251), which was filed on February 24, 2000: **Chen et al.**, "Minimal regions in the Arabidopsis Pistillata promoter responsive to the Apetala3/pistillata feedback control do not contain a CArG box," *Sex Plant Reprod.*, pp. 85-94, 2000; **Donald et al.**, "Mutation of either G box or I box sequences profoundly affects expression from the Arabidopsis rbcS-1A promoter," *The EMBO Journal* 9(6):1717-1726, 1990; **Tymms et al.**, "A novel epithelial-expressed ETS gene, ELF3: human and murine cDNA sequences, murine genomic organization, human mapping to 1q32.2 and expression in tissues and cancer," *Oncogene* 15:2449-2462, 1997; and **Rounsley et al.**, GenBank Accession No. B28787, 1997. Copies of these documents are enclosed.

The filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37 C.F.R. §1.56.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By

Tanya M. Harding, Ph.D.  
Registration No. 42,630

One World Trade Center, Suite 1600  
121 S.W. Salmon Street  
Portland, Oregon 97204  
Telephone: (503) 226-7391  
Facsimile: (503) 228-9446

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Attorney Docket Number</b>	1505-67088	
		<b>Application Number</b>	Not assigned	
		<b>Filing Date</b>	Herewith	
		<b>First Named Inventor</b>	Wagner	
		<b>Art Unit</b>	Not assigned	
		<b>Examiner Name</b>	Not assigned	
<b>U.S. PATENT DOCUMENTS</b>				
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>Number</b>	<b>Date</b>	<b>Name</b>
		4,990,607 A	2/1991	Katagiri <i>et al.</i>
		5,563,032 A	10/1996	Fields <i>et al.</i>
		5,811,536 A	9/1998	Yanofsky
		6,002,069 A	12/1999	Yanofsky
<b>FOREIGN PATENT DOCUMENTS</b>				
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>Number</b>	<b>Date</b>	<b>Country</b>
		WO 00/09658	2/2000	WO
<b>Examiner's Initials*</b>	<b>Cite No. (optional)</b>	<b>OTHER DOCUMENTS</b>		
		Carré, "ELF3: a circadian safeguard to buffer effects of light," <i>Plant Science</i> 7(1):4-6, 2002.		
		Chen <i>et al.</i> , "Minimal regions in the Arabidopsis Pistillata promoter responsive to the Apetala3/pistillata feedback control do not contain a CARG box," <i>Sex Plant Reprod.</i> , pp. 85-94, 2000.		
		Covington <i>et al.</i> , "ELF3 modulates resetting of the circadian clock in Arabidopsis," <i>Plant Cell</i> 13:1305-1315, 2001.		
		Donald <i>et al.</i> , "Mutation of either G box or I box sequences profoundly affects expression from the Arabidopsis rbcS-1A promoter," <i>The EMBO Journal</i> 9(6):1717-1726, 1990.		
		GardenWeb Glossary of Botanical Terms, at <a href="http://glossary.gardenweb.com/glossary/">glossary.gardenweb.com/glossary/</a> , accessed January 6, 2003.		

<b>EXAMINER SIGNATURE:</b>	<b>DATE CONSIDERED:</b>
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Attorney Docket Number</b>	1505-67088
		<b>Application Number</b>	Not assigned
		<b>Filing Date</b>	Herewith
		<b>First Named Inventor</b>	Wagner
		<b>Art Unit</b>	Not assigned
		<b>Examiner Name</b>	Not assigned
		Tymms <i>et al.</i> , "A novel epithelial-expressed ETS gene, ELF3: human and murine cDNA sequences, murine genomic organization, human mapping to 1q32.2 and expression in tissues and cancer," <i>Oncogene</i> 15:2449-2462, 1997.	
		Wang and Tobin, "Constitutive Expression of the <i>CIRCADIAN CLOCK ASSOCIATED 1 (CCA1)</i> Gene Disrupts Circadian Rhythms and Suppresses Its Own Expression," <i>Cell</i> , 93:1207-1217, 1998.	
		Weigel <i>et al.</i> , "LEAFY Controls Floral Meristem Identity in Arabidopsis," <i>Cell</i> 69:843-859, 1992.	
		Zagotta <i>et al.</i> , "The <i>Arabidopsis</i> <i>ELF3</i> gene regulates vegetative photomorphogenesis and the photoperiodic induction of flowering," <i>Plant J.</i> 10(4):691-702, 1996.	
		Zagotta <i>et al.</i> , "Early-flowering Mutants of <i>Arabidopsis thaliana</i> ," <i>Aust. J. Plant Physiol.</i> , 19:411-418, 1992.	

EXAMINER SIGNATURE:	DATE CONSIDERED:
<p>* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Attorney Docket Number</b>	1505-67088
		<b>Application Number</b>	Not assigned
		<b>Filing Date</b>	Herewith
		<b>First Named Inventor</b>	Wagner
		<b>Art Unit</b>	Not assigned
		<b>Examiner Name</b>	Not assigned
		Foden-Vencil, "Oregon research team studies genetic manipulation of plants," <i>Oregonian Science</i> section, 1992.	
		"UO Molecular Biologist Studying Genes that Make Plants Flower," <i>Advance Science &amp; Technology Institute</i> , University of Oregon, p. 5, 1994.	
		Hicks <i>et al.</i> , "Arabidopsis early-flowering mutants reveal multiple levels of regulation in the vegetative-to-floral transition," <i>Cell Dev. Biol.</i> , 7:409-418, 1996.	
		Hicks <i>et al.</i> , "Early flowering3 encodes a novel protein that regulates circadian clock function and flowering in Arabidopsis," <i>The Plant Cell</i> 13:1281-1292, 2001.	
		Hicks <i>et al.</i> , "Conditional Circadian Dysfunction of the Arabidopsis early-flowering 3 Mutant," <i>Science</i> , 274:790-792, 1996.	
		Hill <i>et al.</i> , "Functional analysis of conserved histidines in ADP-glucose pyrophosphorylase from <i>Escherichia coli</i> ," <i>Biochemical and Biophysical</i> 244:573-577, 1998.	
		Lazar <i>et al.</i> , "Transforming growth factor $\alpha$ : mutation of aspartic acid 47 and leucine 48 results in different biological activities," <i>Molecular and Cellular Biology</i> 8:1247-1252, 1988.	
		Newman <i>et al.</i> , 21244 CD4-14 <i>Arabidopsis thaliana</i> cDNA clone F5H5T3, GenBank Accession # N96569, 1998.	
		Puzio <i>et al.</i> , "A New Nematode Responsible Gene in Arabidopsis Thaliana," Database SPTREML-11, O04419, 1997.	
		Puzio <i>et al.</i> , "Isolation of a gene from <i>Arabidopsis thaliana</i> related to nematode feeding structures," <i>Gene</i> , 239:163-175, 1999.	
		Puzio <i>et al.</i> , Nematode Responsive Protein, EMBL Accession No. Y11994, 1997.	
		Puzio <i>et al.</i> , Database Genebank, Accession number O04419, 1997.	
		Rounsley <i>et al.</i> , GenBank Accession No. B28787, 1997.	
		Schaffer <i>et al.</i> , "The late elongated hypocotyl Mutation of <i>Arabidopsis</i> Disrupts Circadian Rhythms and the Photoperiodic Control of Flowering," <i>Cell</i> 93:1219-1229, 1998.	
		Shannon <i>et al.</i> , "A Mutation in the Arabidopsis <i>TFL1</i> Gene Affects Inflorescence Meristem Development," <i>The Plant Cell</i> 3:877-892, 1991.	
		Town <i>et al.</i> , Accession No. BH456629, 12/12/2001.	

EXAMINER SIGNATURE:	DATE CONSIDERED:
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	